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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 09/782,706             | HAGIHARA, YOSHIO    |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Allen C. Ho            | 2882                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 12 September 2003.
2. ☒ The allowed claim(s) is/are 4-6 and 10-16.
3. ☒ The drawings filed on 13 February 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.**

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 4-6 and 10-16 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With regard to claim 4, the prior art discloses an image sensor comprising an output circuit that includes a temperature sensor. However, the prior fails to teach or fairly suggest that the output circuit comprises: a differential amplifier circuit that receives at a non-inverting input terminal thereof a direct-current voltage; and a voltage division circuit composed of two resistors connected in series, of which one resistor has one end connected to an output terminal of the differential amplifier circuit, and of which the other resistor receives at one end the electrical signal output from the photoelectric conversion portion, a node between the two resistors being connected to an inverting input terminal of the differential amplifier circuit, wherein one of the two resistors constituting the voltage division circuit is a temperature-sensitive resistor that serves as the temperature sensor, as claimed in claim 4.

With regard to claim 5, the prior art discloses an image sensor comprising an output circuit that includes a temperature sensor. However, the prior art fails to teach or fairly suggest that the output circuit comprises: a differential amplifier circuit; a first voltage division circuit composed of two resistors connected in series, of which one resistor receives at one end a direct-current voltage, and of which the other resistor receives at one end the electric signal output from the photoelectric conversion portion, a node between these two resistors being connected to a non-inverting input terminal of the differential amplifier circuit; and a second voltage division

circuit composed of two resistors connected in series, of which one resistor has one end connected to an output terminal of the differential amplifier circuit, and of which the other resistor receives at one end a direct-current voltage, a node between these two resistors being connected to an inverting input terminal of the differential amplifier circuit; wherein one of the two resistors constituting the first voltage division circuit is a temperature-sensitive resistor that serves as the temperature sensor, and one of the two resistor constituting the second voltage division circuit is a temperature-sensitive resistor that serves as the temperature sensor, as claimed in claim 5.

With regard to claim 6, the prior art discloses an image sensor comprising an output circuit that includes a temperature sensor. However, the prior art fails to teach or fairly suggest that the output circuit comprises: a differential amplifier circuit that receives at a non-inverting input terminal thereof the electric signal output from the photoelectric conversion portion; and a voltage division circuit composed of two resistors connected in series, of which one resistor has one end connected to an output terminal of the differential amplifier circuit, and of which the other resistor receives at one end a direct-current voltage, a node between the two resistors being connected to the inverting input terminal of the differential amplifier circuit, wherein one of the two resistors constituting the voltage division circuit is a temperature-sensitive resistor that serves as the temperature sensor, as claimed in claim 6.

With regard to claims 10-16, the prior art discloses an image-sensing device a color temperature detection portion that detects a color temperature of a subject to be sensed. However, the prior art fails to teach or fairly suggest that the image-sensing device further comprises an initial state setting portion that corrects the plurality of color signals output from

each pixel in such a way that the color signals have a specific correlation with one another at a given color temperature; and a white balance adjustment portion that further corrects the plurality of color signals already corrected by the initial state setting portion in such a way that the color signals have the specific correlation with one another at the color temperature detected by the color temperature detection portion, as claimed in claim 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (703) 308-6189. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (703) 308-4858. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Allen C. Ho  
Patent Examiner  
Art Unit 2882

ACH ACH 10.07.03

  
DAVID V. BRUCE  
PRIMARY EXAMINER